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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,189

12/30/2005

Alex Treystman

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DARBY & DARBY P.C.

P.O. BOX 770

Church Street Station

New York, NY 10008-0770

EXAMINER

GIBSON, ROY DEAN

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

09/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/554,189	Applicant(s) TREYSTMAN ET AL.	
	Examiner Roy D. Gibson	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 9-11, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 8, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/19/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6, 7, 9-11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machold et al. (6,673,098) in view of Becker (5,554,014).

Regarding claim 1-3, 9-11, Machold et al. disclose an apparatus and its method of use for warming a catheter, comprising:

a pump unit (139), comprising:

a non-disposable pump drive; and a disposable pump, removably couplable to the pump drive, comprising an interior volume and an exterior volume between which liquid is transferred uni-directionally on operation of the pump drive, and a ventilation unit (air vents) configured to allow gas passage between the pump and atmospheric surroundings of the pump while preventing passage of the liquid therebetween;

a heating unit (5), comprising: a non-disposable section comprising a heating element and a temperature sensor; and a disposable heated section, removably couplable to the non-disposable section, comprising an inlet and an outlet orifice and configured to transfer the liquid therebetween, and to maintain the liquid in good thermal contact with the heating element and the temperature sensor when coupled to the non-disposable section; and disposable tubing coupling the disposable pump, the

Art Unit: 3739

disposable heated section, and the catheter, so that the disposable pump, the disposable heated section, and the catheter comprise a closed circuit for the liquid (col. 7, line 1-col. 8, line 28, col. 9, lines 14-31, col. 21, lines 24-53, and col. 31, lines 12-33).

But, Machold et al. fail to specifically disclose wherein the non-disposable pump drive comprises an eccentric coupled to oscillate a connecting rod, and wherein the disposable pump comprises a flexible diaphragm which is fixedly attached to the disposable pump and which is configured to removably mate with the connecting rod; and wherein the non-disposable pump drive comprises a housing which retains the eccentric and the connecting rod, and which is configured to fixedly retain the disposable pump when the pump is removably coupled to the pump drive.

However, Becker discloses a diaphragm pump with all of these features (col. 4, line 49-col. 5, line 29). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the system of Machold et al. as taught by Becker, to provide an alternative equivalent pump and drive to circulate fluid through the catheter and heat exchanger.

Further to claims 6, 7 and 14-15, Machold et al. disclose wherein the disposable heated section (20) comprises a tube (equivalent to flow channel 34) which is configured to direct flow of the liquid therein so as to maintain the liquid in good thermal contact with the temperature sensor; and

wherein the tube is implemented from heat- insulating material, which inherently reduces heat transfer between the liquid in the tube and the liquid external to the tube.

Allowable Subject Matter

Claims 4, 5, 8, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Becker et al. (5,275,541) disclose a fluid operated valve for diaphragm pumps; and Lai et al. (US 2003/0127213) disclose a heat exchange device which can be coupled to a pump.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on Tu-Th, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy D. Gibson/
Primary Examiner
Art Unit 3739

September 9, 2009